

~~SECRET~~

Nº 110

Economic Intelligence Memorandum

ANNUAL REVIEW OF MERCHANT SHIPPING
IN THE SINO-SOVIET BLOC
1960



CIA/RR EM 61-15

14 July 1961

CIA HISTORICAL REVIEW PROGRAM
RELEASE IN FULL 1998

CENTRAL INTELLIGENCE AGENCY

Office of Research and Reports

~~SECRET~~

~~SECRET~~

Economic Intelligence Memorandum

ANNUAL REVIEW OF MERCHANT SHIPPING
IN THE SINO-SOVIET BLOC
1960

CIA/RR EM 61-15

~~WARNING~~

~~This material contains information affecting
the National Defense of the United States
within the meaning of the espionage laws,
Title 18, USC, Secs. 793 and 794, the trans-
mission or revelation of which in any manner
to an unauthorized person is prohibited by law.~~

CENTRAL INTELLIGENCE AGENCY
Office of Research and Reports

11
~~SECRET~~

~~S-E-C-R-E-T~~

FOREWORD

This memorandum is one in a series of annual publications that are designed to present in summary form the significant developments in transportation in the Sino-Soviet Bloc during each preceding calendar year. In addition to the memorandum on merchant shipping, the series includes two other annual publications, one on developments in inland transport in the Sino-Soviet Bloc and another on civil aviation in the Sino-Soviet Bloc.

This memorandum has not been coordinated with other USIB agencies.

~~S-E-C-R-E-T~~

~~S-E-C-R-E-T~~

CONTENTS

	<u>Page</u>
I. Bloc-Wide Developments	1
A. Growth and Performance	1
B. Coordinated Shipping Services in Southeast Asia . .	3
C. Sino-Satellite Merchant Shipping Activities	5
D. Activities in West Africa	7
II. USSR	7
A. Growth of the Fleet	7
B. Utilization of Foreign Shipping	9
C. Pattern of Employment	10
D. Expansion of the Tanker Fleet	11
E. Prospects, 1961-65	12
III. European Satellites	13
A. Growth of the Fleets	13
1. General	13
2. Sources and Costs of Added Tonnage	14
3. Fleet Characteristics	16
B. Performance	17
C. Utilization of Foreign Shipping	17
D. Other Developments	18
1. Poland	18
2. East Germany	19
E. Prospects for 1961	20
IV. Communist Far East	20
A. General	20
B. Communist China	22
1. Growth of the Fleet	22
2. Utilization of Foreign Shipping	24
3. Prospects for 1961	24

- v -

~~S-E-C-R-E-T~~

[p. iv blank]

~~S E C R E T~~

Appendix

	<u>Page</u>
Statistical Tables	27

Tables

1. Estimated Performance of the Merchant Fleets of the Sino-Soviet Bloc, 1956-60	3
2. Sources and Costs of Additions to the Soviet Merchant Fleet, 1960	8
3. Exports of Petroleum from Soviet Ports, 1958-60	9
4. Sources and Costs of Additions to the Merchant Fleets of the European Satellites, 1960	15
5. Characteristics of the Merchant Fleets of the European Satellites, 1959-60	16
6. Estimated Performance of the Merchant Fleets of the Communist Far East, 1956-60	21
7. Source of Additions to the Merchant Fleet of Communist China, 1956-60	23
8. Merchant Fleets of the Sino-Soviet Bloc, by Type, Number, and Tonnage, 1957-60 and 1965	29
9. Seaborne Foreign Trade of the Sino-Soviet Bloc, 1956-60	30
10. Estimated Performance of the Merchant Fleets of the European Satellites, 1956-60	33
11. Merchant Fleets of the European Satellites, by Type, Number, and Tonnage, 1957-60 and 1965	34

~~S E C R E T~~

~~S-E-C-R-E-T~~

ANNUAL REVIEW OF MERCHANT SHIPPING
IN THE SINO-SOVIET BLOC*
1960

I. Bloc-Wide Developments

A. Growth and Performance

The net additions to the vessel tonnage of the combined merchant fleet of the Sino-Soviet Bloc in 1960 were the largest of any year to date.** The net tonnages added during 1956-60 were as follows (in thousands of deadweight tons -- DWT***):

<u>Year</u>	<u>Total</u>	<u>USSR</u>	<u>Communist China</u>	<u>European Satellites</u>
1960	976.1	574.2	134.1	267.8
1959	650.6	280.1	146.2	224.3
1958	591.0	245.0	143.7	202.3
1957	407.8	209.1	69.8	128.9
1956	245.7	217.0	20.7	8.0

Additions to both the Soviet fleet and the combined fleet of the European Satellites in 1960 were at a higher level than in any previous year. The net additions to the Chinese fleet were well below the levels of 1958 and the peak year of 1959. The increase in the Soviet fleet was most dramatic, particularly in the acquisition of tankers. The 270,000 DWT of new tanker tonnage was three times the tanker tonnage acquired in 1959 and exceeded the previous

* The estimates and conclusions in this memorandum represent the best judgment of this Office as of 1 June 1960.

** The discussion of ships and fleets in this memorandum refers only to ships of 1,000 gross register tons (GRT) and above and does not include ships in the Caspian Sea. Figures for the Soviet fleet include refrigerator ships in the fishing fleet. (Gross register tonnage is a measure of the cubic capacity of the cargo space of a ship expressed in tons at the rate of 1 gross register ton per 100 cubic feet.) Tonnages are given in metric tons throughout this memorandum.

*** Deadweight tonnage is a measure of the carrying capacity of a ship in metric tons -- that is, the difference between the ship's displacement light and its displacement loaded.

1.
~~S-E-C-R-E-T~~

~~S-E-C-R-E-T~~

high of 128,000 DWT acquired in 1956. However, the additions to the Soviet dry cargo fleet, while proportionately more modest, were of greater magnitude, exceeding 295,000 DWT and representing a new high in the annual growth of the Soviet dry cargo fleet.

In numbers of ships the combined fleet of the Sino-Soviet Bloc increased by 19 tankers and 105 dry cargo vessels for a total inventory at the end of 1960 of 1,173 ships and 6.6 million DWT (see Table 8*). Total investments by the Sino-Soviet Bloc in expansion of the fleet during 1960 probably amounted to almost US \$240 million.** The USSR, purchasing entirely newly constructed ships, accounted for about 62 percent of the total outlay. A total of about \$71 million was paid to non-Bloc countries.

In 1960, as in each year since 1956, the performance of the Bloc fleets increased, as shown in Table 1.*** The amount of ton-miles has been increasing faster than the amount of tons carried, a result of greater average lengths of haul as more cargo is carried on the longer routes in international trade. Whereas the Satellite fleets are engaged most heavily in international trade and are constantly increasing service on the long-haul routes, about 70 percent of the tons carried by the Soviet fleet and almost 100 percent of the tons carried by the Chinese fleet are in domestic coastal or intercoastal trade. The average length of haul of the Satellite fleets is almost four times the average length of haul of the Soviet fleet and almost seven times the average length of haul of the Chinese fleet. Thus, although the Satellite fleets were responsible for only 7 percent of the tons carried by the combined Bloc fleets, ton-miles performed by the Satellite fleets amounted to 26 percent of the total Bloc performance.

As in previous years, the Sino-Soviet Bloc continued to utilize foreign shipping to carry a large share of its seaborne foreign trade. All of the 12 million tons of the seaborne foreign trade of Communist China and 5.2 million tons of its coastal shipping moved on foreign vessels. The USSR and the European Satellites had 75 million tons of seaborne foreign trade in 1960. Although both the USSR and the European Satellites carried greater absolute volumes of this trade than ever before, they still relied on foreign shipping to carry 48.5 million tons of this trade (see Table 9†). This amount was an increase of more than 10 million tons above 1959 and a somewhat larger share of the total than in 1958 and 1959.

* Appendix, p. 29, below.

** The dollar values expressed in this memorandum are current US dollars.

*** Table 1 follows on p. 3.

† Appendix, p. 30, below.

~~S-E-C-R-E-T~~

~~SECRET~~

Table 1

Estimated Performance of the Merchant Fleets
of the Sino-Soviet Bloc a/
1956-60

<u>Area</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>
<u>Million Metric Tons Carried</u>					
USSR	57.7	65.7	70.8	73.5	75.9
European Satellites	4.3	5.0	5.8	7.3	9.5
Communist Far East <u>b/</u>	12.0	14.4	21.7	34.6	43.0
Total	<u>74.0</u>	<u>85.1</u>	<u>98.3</u>	<u>115.4</u>	<u>128.4</u>
<u>Billion Ton-Miles <u>c/</u></u>					
USSR	44.5	50.0	57.4	62.5	70.9
European Satellites	11.7	13.7	17.1	24.8	32.1
Communist Far East <u>b/</u>	6.1	7.7	10.3	15.6	19.6
Total	<u>62.3</u>	<u>71.4</u>	<u>84.8</u>	<u>102.9</u>	<u>122.6</u>

a. Including performance of ships of less than 1,000 GRT.

b. About 25 percent of the ton-mile performance reported by Communist China in 1960 and about 12 percent of the performance in tons carried were accounted for by those non-Bloc ships chartered by China that were used in the coastal trade. The proportions in 1959 were about 30 percent and 15 percent, respectively.

c. Metric ton - nautical miles.

B. Coordinated Shipping Services in Southeast Asia

In 1960 the Bloc, presumably under the auspices of the Council for Mutual Economic Assistance (CEMA), undertook a series of actions portending an intensive shipping offensive in Southeast Asia. Several developments noted during the year are an apparent implementation of a long-proclaimed intention to pool merchant ships under the coordinated control of CEMA. It appears obvious from the evidence cited below that the main purpose of the program is economic exploitation as well as harassment of the established liner services in the area.

~~SECRET~~

~~SECRET~~

The increasing attention paid by maritime fleets of the Soviet Bloc to Southeast Asia had several significant results during the year. Poland successfully continued its efforts to reinstate Polish shipping services to Thailand. These services had ceased in November 1959, when the Thai government closed its ports to all Bloc ships except those from Bloc countries with whom Thailand had established diplomatic relations. The Thai government announced in January 1961 that Poland had been invited to inaugurate a service from Bangkok to Europe as a measure against high freight rates and said that Polish ships would call once monthly to load jute, rice, and rubber at less than the Far Eastern Conference rates.* Thailand indicated that arrangements also have been made for other nonconference lines to call at Thai ports. The Thai action inviting Polish shipping services was a reversal of policy, inasmuch as there are still no diplomatic relations between Thailand and Poland.

In July 1960 a Czechoslovak ship made the first call of a Bloc vessel at a Cambodian port. This development culminated in an announcement in December 1960 from Phnom Penh that a joint Czechoslovak-Cambodian shipping company was to be established and that a Sino-Cambodian shipping firm also would be established. In January 1961, plans had progressed sufficiently to allow the announcement of names and routes: The Sino-Khmero Shipping Company to ply between Cambodia and China and the Khmero-Czech Shipping Company to ply between Cambodia and Europe. Both joint companies also are to help train Cambodians in maritime matters.**

In May 1960 an East German freighter made the first call of an East German vessel at a Burmese port. After exploring the market, the East German shipping company, VEB Deutsche Seereederei (VDS), announced in September 1960 that it was opening regular services between Burma and the UK/European Continent and named as its agent the Burma Agents Corporation. The four sailings that were advertised for September through December 1960 were made, and the ships loaded 2,500 to 4,500 tons each at rates 10 percent below Conference rates less rebates.

Indications that this intensification of service in Southeast Asia was the result of an integrated Bloc plan came from reports of a conference in September 1960 at the Soviet Embassy in Rangoon of all Bloc commercial representatives to discuss the merging of Sino-Soviet Bloc shipping lines to exploit the areas. A representative of the

* Apparently in reaction to the rate-cutting practices by the East German fleet in the area.

** For another case of a close connection between Communist China and Czechoslovakia in the maritime field, see C, p. 5, below.

~~SECRET~~

~~S E C R E T~~

Burma Agents Corporation was informed that his firm eventually would be named exclusive agent for the cartel that would pool the fleets involved into one line with coordinated schedules. The combined fleet services also would be extended to new ports in the area even if the cargo were in uneconomic quantities.

Although it is not certain whether or not this coordinated program has been implemented in detail, a new impetus to the program became likely when a former official of Sovfracht* replaced the Soviet Commercial Counselor. The new Counselor was reported to have been sent to Rangoon for the express purpose of handling preparations for the Bloc shipping cartel. The representative of the Burma Agents Corporation reported that the USSR would begin service between Odessa and Rangoon early in 1961, with calls at Karachi, Bombay, Colombo, and Calcutta, and again the Burma Agents Corporation was to be named as agent. The representative also reported, moreover, that the Polish Ocean Lines would transfer its agency in Rangoon to the Burma Agents Corporation.**

The most immediate effect of the East German service was felt by the three conference lines operating between Burma and the UK. Other members of the Bay of Bengal Homeward Conference serving other terminal areas, such as the Far East, as well as other Southeast Asian and Far East Conferences would be affected if the full cartel were implemented to the maximum degree reported.

In December the Burma-UK Conference put pressure on the East German shipping company (VDS) in East Berlin, and conference sources reported that negotiations culminated in a temporary agreement whereby the VDS would charge Conference rates and limit its operations to service between Burma and East Germany. In April, however, the VDS put two ships into Rangoon, offered rates 17 to 20 percent lower than Conference rates, and procured general cargo for the UK. During the call of the second ship, the Conference lowered rates in turn to below the VDS rates. It is apparent that any agreement which may have been made in December is no longer applicable and that a rate war is underway in the Burma-Europe trade.

C. Sino-Satellite Merchant Shipping Activities

The three-way transfer of a ship from the Polish flag to the Chinese Communist flag in 1959 and then to the Czechoslovak flag in 1960 suggests an association between China and Czechoslovakia similar

* The Soviet ship-chartering agency.

** No notices of termination of agreements have been reported to date by the present agents in Rangoon for the Soviet or Polish shipping lines.

~~S E C R E T~~

~~S-E-C-R-E-T~~

to Chinese arrangements with Poland. Since late in 1951 the organization known as Chipolbrok* (a joint venture owned 50 percent by Poland and 50 percent by Communist China) has operated ships under the Polish flag. By 1959, 16 ships including 1 tanker and totaling 165,800 DWT had been assigned to Chipolbrok. During 1960, three ships totaling about 38,000 DWT were added to the Chipolbrok fleet, and one old freighter of 9,520 DWT was transferred to the Chinese Communist flag. Although ships of the Chipolbrok fleet fly the Polish flag, there is evidence that about half of the ships are owned outright by China. In the last few years, several of the newly built ships added to the Polish fleet were for Chipolbrok account. There is some evidence that all of the 10,000-DWT to 12,800-DWT freighters and the 20,000-DWT tankers built and on order in Yugoslavia for Poland and Czechoslovakia were and are for Chinese account. In 1959, two ships of the Polish fleet, believed to be Chipolbrok ships, were "sold" to China and transferred to the Chinese flag, one old (built in 1917) and the other quite new (built in 1957).

The two old freighters transferred in 1959 and 1960 are still under the Chinese flag. The comparatively new freighter, the former Fryderyk Chopin, was subsequently transferred in 1960 to the Czechoslovak flag and is now the Orlik. This is the first known instance of the transfer of a ship from the Chinese flag to one of the European Bloc flags.

In April 1959 the Czechoslovaks reported the formation of a new company, the Czechoslovak Ocean Shipping Company, an "international stock company." Later in 1959 the Poles transferred the Zeromski, also believed to have been a Chipolbrok ship, to the Czechoslovak flag, and it is now the Orava. Both the Orava and the Orlik, as well as three other Czechoslovak ships, have Chinese crew members. Another Czechoslovak vessel, the Slapy, was delivered at Constanta in July 1960, sailed for Whampoa, and has been in Chinese waters ever since. The Czechoslovak tanker Ostrava is employed in the Black Sea-China run and apparently carries little or no Czechoslovak cargo either way.

It is highly probable, therefore, that at least five and possibly seven of the Czechoslovak ships, totaling 59,000 to 75,000 DWT, are at least under Chinese control if not Chinese ownership. When combined with the probable Chinese interests in Polish flag vessels, the ships under Chinese control or ownership amount to about 25 ships totaling about 265,000 DWT.

* Chinese-Polish Shipbrokers Corporation.

~~S-E-C-R-E-T~~

~~S-E-C-R-E-T~~

D. Activities in West Africa

The calls of Bloc ships at West African ports increased considerably in 1960, reflecting the intense interest of the Bloc in these emerging nations. Poland, which started regular liner service to West African ports late in 1958, expanded its service consistently in 1959-60. During a 6-month period in 1960, Polish ships made 65 calls at West African ports, or 30 percent more than during the same period in 1959. Countries served in 1959 were Morocco, the Canary Islands, Senegal, Guinea, Sierra Leone, Liberia, Ghana, Nigeria, and Gabon. In 1960, two more ports were added in Ghana and in the Canary Islands, and the first call was made at the Portuguese island of Sao Thome. Twenty-six percent of the calls were at Casablanca, Morocco, almost all by tramp ships. All but two calls at the other ports were by scheduled liners.

In the same sample period, Soviet ships made 19 calls at West African ports in 1960, six times as many calls as in 1959. Almost 50 percent were at Casablanca, Morocco. Other countries served were Guinea and Ghana.* The USSR took the opportunity afforded by these 1960 calls to announce the opening of liner service, but the service was actually tramp in nature.

East Germany has been publicizing its intention to establish liner service to West Africa. Although no ships have yet been scheduled on the route, the two refrigerator ships (banana boats) purchased in 1960 from French owners probably will be assigned to a West Africa - Europe run.

II. USSR

A. Growth of the Fleet

In 1960, deliveries of new vessels to the Soviet maritime fleet reached a new high of 602,930 DWT. The highest figure previously attained was 342,000 DWT in 1957. The new deliveries included 55 dry cargo vessels and 14 tankers for the Ministry of the Maritime Fleet and 5 refrigerator vessels for the Ministry of the Fish Industry. The estimated value of these additions, based on world market prices, was almost \$150 million, an increase of 50 percent above the investment in shipping during 1959.

All of the ships added during 1960 were of new construction, and the majority were series-produced units competitive with new types from Western shipyards. Among the additions were seven classes appearing for the first time. The most important of these new classes

* In August, two ships called at the Congo, but none has called since.

~~S-E-C-R-E-T~~

~~SECRET~~

were the Pekin, a 29,980-DWT tanker with a speed of 17 knots, and the Tiksi, an 11,500-DWT freighter with a speed of 16 knots. In the second half of the year the USSR took steps toward the acquisition of a larger and faster tanker fleet.* These purchases reflect the increased capabilities and intentions of the USSR to dispose of its growing volume of surplus petroleum in export markets.

The sources and the estimated costs of the ships added to the Soviet fleet in 1960 are shown in Table 2.

Table 2
Sources and Costs of Additions
to the Soviet Merchant Fleet
1960

Origin	Units	Deadweight Tons	Estimated Cost (Million US \$)
USSR	15	219,130	42.0
European Satellites	41	194,830	63.1
Free World	18	188,970	43.9
Total	<u>74</u>	<u>602,930</u>	<u>149.0</u>

When compared with a similar tabulation for 1959, these figures show that the tonnage purchased from the West increased almost three-fold in 1960. Domestic production in the USSR accounted for 36 percent of the total growth compared with 28 percent in 1959. Although the 195,000 DWT acquired in the European Satellites represented a slight increase above 1959, their share of the total declined from 52 to 32 percent.

After allowing for deletions from the fleet resulting from sinkings, retirements, and other causes, the net effect of the above additions plus the transfer of a tanker from the Caspian to the Black Sea fleet was to increase the Soviet maritime fleet from 764 vessels totaling 3.9 million DWT in 1959 to 829 vessels totaling 4.5 million DWT at the end of 1960.** The large input of new vessels also caused

* For a discussion of the acquisitions, see D, p. 11, below.

** Details are shown in Table 8, Appendix, p. 29, below.

~~SECRET~~

~~SECRET~~

the average age to drop from 15 to 14 years and produced favorable increases in the average size and average speed of the ships in the Soviet fleet.

B. Utilization of Foreign Shipping

As in previous years, the USSR carried a greater volume of its own seaborne trade, which increased by 24 percent in 1960. However, the percentage share carried by foreign vessels (see Table 9*) increased to 54 percent, and for the first time since 1956 the USSR failed to carry at least half of this trade.

Much of this increase in the use of foreign shipping is a result of the increased trade in petroleum (see Table 3).

Table 3
Exports of Petroleum from Soviet Ports
1958-60

	Million Metric Tons		
	<u>1958</u>	<u>1959</u>	<u>1960</u>
In Soviet tankers			
Black Sea ports	5.6	5.5	5.4
Klaipeda	0	Negl.	1.5
In Satellite tankers	0.1	0.3	0.4
In Free World tankers	4.0	8.8	13.2
Total	<u>9.7</u>	<u>14.6</u>	<u>20.5</u>

In spite of the substantial additions to the tanker fleet in 1960 and a slight improvement in the utilization of this fleet,** the USSR has had to turn to foreign shipping to carry the greater share of its growing trade in petroleum. The major explanation for the increased utilization of foreign shipping appears, therefore, to lie in a deliberate choice of the USSR to use its own tankers on long-haul movements. This development is most apparent on the new

* Appendix, p. 30, below.

** When measured by tons of cargo carried per DWT available, the performance of the Soviet tanker fleet increased from 6.6 tons per DWT in 1959 to 6.7 tons per DWT in 1960.

~~S-E-C-R-E-T~~

run to Cuba, on which Soviet tankers carried more than half of the 2 million tons of petroleum moved in 1960.*

C. Pattern of Employment

In addition to the coastal and intercoastal movements of the Soviet maritime fleet, Soviet ships in 1960 operated along the following important routes:

<u>Basin of Origin</u>	<u>Destination</u>
Baltic	North Sea and Atlantic Europe North and West Africa South and Southeast Asia Caribbean and Canada
Northern	Baltic Sea, Atlantic Europe, and Mediterranean
Black Sea	Mediterranean Continental Europe South and Southeast Asia Far East West Africa Caribbean
Far Eastern	Far East Caribbean and Canada Atlantic Europe South and Southeast Asia

The most significant change in the employment of the Soviet maritime fleet during 1960 was the diversion of large numbers of tankers and dry cargo vessels to the expanding Cuba trade. The USSR exported no petroleum to Cuba in 1959, but in 1960 it exported almost 2 million tons. Exports to Cuba of dry cargoes such as grains, fertilizers, and farm machinery, which were negligible in 1959, amounted to almost 200,000 tons in 1960. In a return movement, Soviet imports of sugar amounted to about 1.4 million tons compared with 133,000 tons in 1959. To facilitate the movement of dry cargoes, regular service by Soviet ships was initiated between the Soviet Baltic and Cuba. Considerable trade also was carried between Cuba and

* For further discussion of Soviet-Cuban trade, see C, below.

~~S-E-C-R-E-T~~

~~S-E-C-R-E-T~~

Soviet ports in the Far Eastern and Black Sea Basins. Although the USSR attempted to carry this trade with Cuba, the volume of cargo was so large that more than half moved on foreign ships. Probably all of the dry cargo exports to Cuba moved on Soviet ships, but 50 percent of the petroleum exports and probably more than 65 percent of the imports of sugar moved on foreign ships.

Another important change in the pattern of Soviet petroleum movements was initiation of petroleum deliveries from the Baltic port of Klaipeda to consumers along the Baltic. Deliveries of Soviet petroleum to Denmark from Black Sea ports ceased entirely in 1960, and deliveries to Norway, Sweden, and East Germany declined. These reductions, which in the case of Sweden amounted to 500,000 tons, are due in part at least to the beginning of shipments from Klaipeda, which reached an estimated volume of almost 1.5 million tons in 1960.

In other developments the USSR also opened regular service by Soviet freighters to West African ports in Ghana and Guinea. The USSR and shipping companies in France and West Germany entered into new joint shipping agreements, patterned after an existing agreement signed with a British firm in 1959. The French agreement between the *Compagnie Générale Transatlantique* and the *Baltic Steamship Company* calls for each company to supply one small motor freighter under 3,000 DWT for service between the Soviet ports of Leningrad, Riga, and Klaipeda and the French ports of Rouen, Dunkirk, and Le Havre. The West German agreement, between the Horn and Bischoff Lines of Hamburg and the *Baltic Steamship Company*, provides for service between the same Baltic ports and the West German ports of Luebeck, Bremen, and Hamburg.

D. Expansion of the Tanker Fleet

Through the middle of 1960, Soviet acquisitions of tankers under the Seven Year Plan consisted of tankers up to 29,000 DWT from Bloc shipyards and small 4,000-DWT tankers, primarily Finnish, from non-Bloc shipyards. During the second half of 1960 the USSR turned to non-Bloc yards to purchase large and fast tankers ranging from 20,000 to 40,000 DWT. These were the first tankers of more than 4,000 DWT purchased from non-Bloc yards since 1952. Three tankers totaling over 100,000 DWT were purchased during 1960, two from Japan and one from the Netherlands. All indications are that this shift in the pattern of acquisitions of tankers will continue at least through 1965. By the end of April 1961 the USSR had purchased a 25,000-DWT tanker from Yugoslavia and had made known contracts for 24 other large tankers, including a 48,000-DWT tanker from Italy, a 25,000-DWT tanker from the Netherlands, six 35,000-DWT tankers from Japan, and sixteen 25,000-DWT tankers from Yugoslavia.

~~S-E-C-R-E-T~~

~~SECRET~~

Active negotiations are now being carried on for the purchase of 21 additional tankers, as shown in the following tabulation:

<u>Country</u>	<u>Number</u>	<u>Deadweight Tonnage</u>	
		<u>Per Tanker</u>	<u>Total</u>
Yugoslavia	1	33,000	33,000
Netherlands	3	25,000	75,000
Italy	2	48,000	96,000
Italy	6	35,000	210,000
Spain	3	31,000	93,000
Spain	1	20,000	20,000
Japan	5	50,000	250,000
Total	<u>21</u>		<u>777,000</u>

In addition to this intensified program for the acquisition of a large, competitive tanker fleet of supertanker characteristics, the USSR also is undertaking a significant program for the domestic production of large tankers. Late in 1960 the USSR announced that it will begin production in 1961 of the Sofiya, the first of a class of tankers intended to supersede the Soviet-built Pekin-class tanker. The new tankers, which will have steam-turbine drive, will be capable of speeds of about 18 knots and be able to carry 43,000 tons of cargo.

E. Prospects, 1961-65

Deliveries of ships to the Soviet fleet in 1961 may reach a new high of more than 650,000 DWT and will include a higher proportion of modern competitive vessels than in 1960. Production of the outmoded Kazbek tankers probably will be cut back as production of a new class of 18,000-DWT gas turbine tanker is begun in Leningrad. New deliveries will include the first of three fast Japanese-built freighters of 11,800 DWT.

The USSR will continue to purchase large tankers from abroad. One large tanker was purchased from Yugoslavia in January 1961. Further deliveries of tankers anticipated in 1961 include a second tanker from Yugoslavia, two 19,000-DWT tankers from Poland, and at least one tanker each from Italy and the Netherlands.

Disproportionate increases in announced plans for the volume of shipments and ton-mile performance indicate a trend toward substantial increases in the average length of haul, reflecting a Soviet intention to increase the role of its maritime fleet in the carriage of seaborne foreign trade. The expansion of Soviet carriage of its

~~SECRET~~

own trade will take several forms. The volume of cargo to be exported to Cuba is planned to double. A 50-percent increase is planned for exports of timber, which totaled about 3.5 million tons in 1960, with some timber from the Soviet Far East to be shipped as far as the UK and East Germany. At the same time, scheduled line operations by Soviet vessels from the Black Sea to ports in Pakistan, India, Ceylon, and Burma will be increased, and new lines will be opened to Sudan and Costa Rica.

The increasing carriage of foreign trade cargoes on longer routes is having the effect of disrupting original Soviet plan targets for the Seven Year Plan. On the basis of performance since 1958 and plans for 1961, it now appears that the original 1965 plan goals for the volume of shipments will be underfulfilled while the goals for ton-mile performance will be substantially exceeded.

Soviet prospects for the fulfillment of the announced Seven Year Plan goal to double the size of the maritime fleet are excellent, but the plan for expansion of the dry cargo fleet will not be fulfilled. If tankers currently known to have been contracted for are delivered, the tanker fleet, which was planned to increase its capacity by 80 percent, will actually have increased it by 125 percent.

III. European Satellites

A. Growth of the Fleets

1. General

The increase of 25 percent in 1960 in the aggregate dead-weight tonnage of the merchant fleets of the European Satellites represented a slight decline from the rate of increase in 1959. On the basis of the plans for 1965 for a combined fleet of about 2.7 million DWT, it is apparent that the rate of increase will continue to decline. The absolute net amounts added each year, however, have been increasing and reached a new high of 267,800 DWT in 1960 (see Table 11*). It is expected that the volume of additions will continue at about this level for the next 3 years. By 1964 the volume of additions should decrease sharply, or the plan targets for 1965 may be adjusted upward, as was done by both Poland and East Germany in previous Five Year Plan periods.

Acquisitions in 1960 were almost exclusively dry cargo vessels. Only 3 of the 40 ships added (net) during the year were tankers. As was to be expected, Poland achieved the largest net

* Appendix, p. 34, below.

~~SECRET~~

~~S-E-C-R-E-T~~

increase in tonnage, but each of the other Satellites except Albania achieved large increases in relation to total tonnage. The following tabulation shows the net increases in fleet capacities during 1960:

<u>Country</u>	<u>Thousand Deadweight Tons</u>	<u>Percent of 1959 Capacity</u>
Poland	141.8	20.3
East Germany	68.4	39.4
Czechoslovakia	22.3	24.5
Bulgaria	20.3	37.7
Rumania	11.0	31.7
Hungary	2.5	34.7
Albania	1.5	15.6

The addition of four new ships totaling 11,000 DWT to the Rumanian fleet was the first expansion of this fleet since 1951. The launching in Yugoslavia in October 1960 of a 13,000-DWT dry cargo freighter, the first of two for Rumanian account, portends further expansion and modernization of this aged fleet. The purchase by Bulgaria of its first large tanker was its first acquisition since 1956 of a ship of more than 10,000 DWT.

2. Sources and Costs of Added Tonnage

The pattern of acquisitions by the European Satellites in 1960 shows an increase in the purchase of secondhand ships and a reduced reliance on non-Bloc yards for newly built ships. With one exception, all of the secondhand dry cargo ships were purchased from the West. The three tankers added to the Satellite fleets in 1960 were all secondhand purchases from the West.

Purchases of secondhand ships accounted for 41 percent of the additions to the tonnage of the Satellite fleets in 1960 compared with only 31 percent in 1959. New ships from Bloc shipyards provided 43 percent of the tonnage compared with 36 percent in 1959. Only 15 percent were new ships from Western yards compared with 32 percent in 1959. Details of acquisition by each Satellite country are shown in Table 4.*

The cost to the European Satellites of additions to their fleets came to about \$65 million, or 15 percent above the costs in 1959.

* Table 4 follows on p. 15.

~~S-E-C-R-E-T~~

~~SECRET~~

Table 4
Sources and Costs of Additions to the Merchant Fleets
of the European Satellites
1960

Country	Total	Secondhand Ships	Newly Built Ships	
			From Bloc Shipyards	From Non-Bloc Shipyards
Thousand Deadweight Tons				
Poland	156.2	43.7	71.0	41.6
East Germany	68.4	37.1	31.3 a/	0
Czechoslovakia	22.3	19.1 b/	3.2	0
Bulgaria	20.3	17.1	3.2	0
Rumania	11.0	0	11.0	0
Hungary	2.5	0	2.5	0
Albania	1.5	0	0	1.5
Total c/	<u>282.2</u>	<u>117.0</u>	<u>122.2</u>	<u>43.1</u>
Million US \$				
Poland	39.6	1.2	25.4	13.0
East Germany	13.6	6.2	7.4 a/	0
Czechoslovakia	2.9	1.9 b/	1.0	0
Bulgaria	1.7	0.7	1.0	0
Rumania	5.2	0	5.2	0
Hungary	1.6	0	1.6	0
Albania	0.4	0	0	0.4
Total	<u>65.0</u>	<u>10.0</u>	<u>41.6 d/</u>	<u>13.4</u>

a. Including one salvaged ship of 10,570 DWT at an estimated salvage cost of \$1 million.

b. Including one ship sold by Communist China to Czechoslovakia, the Orlik, which originally was the Polish Fryderyk Chopin before its sale to China in 1959. Although the purchase price has been estimated at \$1.3 million based on the world market, it is doubtful that much if any money changed hands. The Orlik probably has been simply assigned to the Czechoslovak fleet but is still owned by China, in much the same fashion as is believed to be the case of the Chipolbrok ships under the Polish flag.

c. Because of rounding, components may not add to the totals shown.

d. Estimated costs of ships built in Bloc yards represent the values at prices prevailing at those Western shipyards whose costs are believed to be most comparable with those at Bloc shipyards.

~~SECRET~~

3. Fleet Characteristics

As shown in Table 5, only the Czechoslovak, Rumanian, and Albanian fleets declined in 1960 in terms of average size, and although the average size of all other fleets increased slightly, the average size of the combined fleets of the European Satellites decreased slightly in 1960 to 6,784 DWT. Average ages of the East German, Czechoslovak, and Bulgarian fleets increased as a result of purchases of secondhand ships. The average age of the combined fleets, however, was reduced to 10.7 years in 1960. Although the Rumanian fleet decreased its average age to 25.4 years in 1960, it is still a very old fleet compared with the world average of about 15 years. Average speeds of those fleets that acquired smaller or older ships in 1960 declined, but the average speed of the combined fleets increased to 13.2 knots in 1960. The average world speed is between 12 and 13 knots.

Table 5
Characteristics of the Merchant Fleets
of the European Satellites a/
1959-60

<u>Country</u>	<u>Average Size (Deadweight Tons)</u>		<u>Average Age (Years)</u>		<u>Average Speed (Knots)</u>	
	<u>1959</u>	<u>1960</u>	<u>1959</u>	<u>1960</u>	<u>1959</u>	<u>1960</u>
Poland	6,917	7,062	11.8	9.9	13.0	13.4
East Germany	8,271	8,348	7.0	8.0	14.1	14.2
Czechoslovakia	11,375	10,300	7.4	8.5	15.0	14.7
Bulgaria	4,891	4,940	8.6	12.8	11.9	11.7
Rumania	4,957	4,155	39.4	25.4	11.9	11.8
Hungary	1,200	1,212	8.0	6.8	9.4	10.2
Albania	3,200	2,775	1.0	1.0	12.0	12.0
Total fleet	6,806	6,784	11.6	10.7	13.0	13.2

a. Including only ships of 1,000 GRT and above.

~~SECRET~~

B. Performance*

Performance in ton-miles of the Satellite fleets, including ships of under 1,000 GRT, increased 29 percent in 1960 compared with an increase of 45 percent in 1959. The lower rate of increase probably was a result of two major factors: (1) additions to the fleets of small ships trading in the short-haul routes and (2) the carriage of more short-haul interport cargo by ships in the long-haul routes.

C. Utilization of Foreign Shipping

During 1960 the increased cargo-carrying capacities of the Satellite fleets made possible a 30-percent increase in the volume of seaborne foreign trade that Satellite countries were able to move on their own vessels.** But at the same time an increase of 20 percent in total seaborne foreign trade in 1960 meant that the use of foreign shipping remained at virtually the same high level as in 1959. Only Bulgaria carried enough additional cargo in its own ships to decrease the amount of seaborne foreign trade left for foreign shipping.

The Satellite countries utilized foreign flag shipping to transport 31.7 million tons of foreign trade cargo in 1960. With the exception of the use of Polish shipping services, there were only a few instances when the Satellite countries used each other's fleets to move this trade. Polish ships are estimated to have carried about 200,000 tons of East German cargo, 1 million tons of Czechoslovak cargo,*** and about 100,000 tons for other Satellites.

In addition, about 600,000 tons of cargo moving in inter-Satellite foreign trade or in Satellite trade with non-Bloc countries were carried on Soviet ships. Soviet ships probably also carried about 500,000 tons of East German-Soviet trade, 200,000 tons of Polish-Soviet trade, and 2 million tons of trade between the USSR and Rumania, Bulgaria, and Albania.

More than 27 million tons of the 31.7 million tons of Satellite seaborne trade carried in 1960 by foreign ships probably were carried in non-Bloc ships. Comparable data for 1959 indicated that about 23 million tons of Satellite trade were carried in non-Bloc ships.

* See Table 10, Appendix, p. 33, below.

** See Table 9, Appendix, p. 30, below.

*** Plans called for Polish ships to carry 25 percent of Czechoslovakia's seaborne trade, which would have been 1.25 million tons, but it is doubtful that this goal was achieved.

~~SECRET~~

~~S-E-C-R-E-T~~

Polish trade accounts for about 45 percent of the seaborne trade of the European Satellites and more than 20 percent of the seaborne trade of the entire Sino-Soviet Bloc. Polish ships are still carrying only about 25 percent of Polish trade, leaving more than 13 million tons to be carried by foreign ships, almost all non-Bloc ships. Only the USSR surpassed this volume in 1960, with 23.3 million tons carried by foreign ships, again almost all in non-Bloc ships.

D. Other Developments*

1. Poland

By the end of 1960, all Polish maritime plans for the period 1956-60 had been exceeded. Tonnage added to the fleet (not including Chipolbrok ships) was 19 percent above plan, and the volume of cargo handled in the ports was 20 percent above plan. Czechoslovak and East German transit through Polish ports increased considerably in 1960, but the largest increase was in Polish foreign trade. The 20 million tons of cargo handled in Polish ports in 1960 already exceeds the long-range port plan to handle 18 million tons in 1965.

In 1960, India placed its first ships on the India-Poland route. The original agreement between India and Poland was concluded in 1956, providing for three ships of each flag on the route. Poland, sometimes using chartered ships, did in fact start India service, but no ship was ever assigned by India. In 1960 a new agreement was signed, providing for one Polish and one Indian ship sailing each month. By the end of 1960, India had placed two ships on the run.

The ships on the Poland-US Gulf line in 1960 added Havana, Cuba, as a port of call on the westbound leg. Poland now has four freighters on this route in addition to four others on the Poland-US Atlantic Coast line. The first ship to call at Havana delivered 3,500 tons of Czechoslovak cargo in December 1960.

In 1960, Polish Ocean Lines had 10 ships, most of them in the 8,000-DWT class, on the South America route. In September an express service was announced, to be served by 4 of the 10 ships, with a guaranteed uniform speed of 15 to 17 knots. At least two of these ships will be newly built vessels acquired from a Danish

* Certain developments concerning operations of the East German, Czechoslovak, and Polish fleets are discussed in I, B, p. 3, above, and I, C, p. 5, above.

~~S-E-C-R-E-T~~

~~SECRET~~

shipyard in 1959 and 1960. Rio de Janiero is planned to be the only discharge port, but cargo is to be loaded for the return trip in Rio, Santos, Montevideo, and Buenos Aires.

The small fishing port of Kolobrzeg was opened in May 1960 for foreign trade cargo. The port is designed to handle small ships (about 1,000 DWT) for the coastal and Baltic service. To date, the export cargo has consisted almost entirely of coal, but there are plans to increase the general cargo capacity. By the end of December, probably not more than 100,000 tons had been handled in the port.

2. East Germany

In May 1960 the first East German ship called at Rangoon, and in September a regularly scheduled service between Rangoon and the UK/European Continent and East German ports was advertised.*

The Freundschaft (10,300 DWT) made a voyage to South America late in 1959 and has stayed on that route through 1960 and early 1961, apparently the beginning of regular service by East Germany to South America. This ship initially called at Brazilian ports only but later expanded the route to Buenos Aires and Montevideo.

The two French refrigerator ships (banana boats) purchased by East Germany in 1960 and still outfitting in Antwerp dockyards are destined for the West Africa route. Although intentions to serve both West Africa and South America have been repeatedly publicized for the past year or two, these will be the first East German ships assigned to West African service.

In September, one of the two Soviet-built East German tankers (11,500 DWT) was switched from its regular Black Sea or Albania to Wismar route and sent from the Black Sea to Cuba with Soviet petroleum. In October the second of the Soviet-built tankers also entered the Black Sea to Cuba trade, and it was reported that both were on time charter to the USSR. In January 1961, however, both were back on the Black Sea to Wismar route. In the meantime, two more tankers of the same type were on order for East Germany in Soviet yards. Although one of these tankers was launched in 1960, apparently it has been placed in the Soviet fleet, and it is now believed that the USSR has postponed further deliveries of tankers to East Germany.

* Discussed in I, B, p. 3, above.

~~SECRET~~

~~S-E-C-R-E-T~~

The newly constructed Petersdorf harbor at Rostock was opened to traffic in May 1960 amid predictions that 700,000 tons would be handled at Petersdorf by the end of 1960. Actually only 360,000 tons were handled in 1960. By 1965, however, the new port area should expand to allow more than 6 million tons to be handled in Rostock compared with less than 1 million tons in 1959.

E. Prospects for 1961

It is expected that all Satellite fleets will increase again in 1961 and that the combined tonnage may be about 1.7 million DWT, including about 15 tankers totaling more than 200,000 DWT. Poland and East Germany probably will gain the most tonnage. Hungary may acquire its first large ships in 1961; Rumania should receive the first of the two 13,000-DWT freighters on order in Yugoslavia; and Bulgaria plans to double its fleet capacity above that of 1960. The first of the Polish-built 18,000-DWT tankers, launched in July 1960, should be delivered to the Polish fleet.

Although fleet performances can be expected to increase, it is believed that the volume of seaborne trade will again rise in proportion. In 1961, there may be more than 35 million tons carried by foreign ships.

IV. Communist Far East

A. General

Developments in merchant shipping in the Communist Far East during 1960 showed no marked changes from 1959. Both North Korea and North Vietnam continued to operate only with ships of less than 1,000 GRT, although North Korea recently launched a 3,000-ton freighter. The combined performance of the fleets of North Korea and North Vietnam continued to be less than 1 percent of the performance of the Chinese Communist Fleet (see Table 6*). A decline in the rate of increase of China's fleet performance and fleet growth reflected the serious economic problems experienced during 1960. The anticipated venture of the Chinese Communists into international shipping services during 1960 also failed to materialize.

Many operating problems continue to harass the Chinese Communist merchant fleet. Shortage of fuel has been a recurring problem, probably greater in 1960 than in preceding years. Congestion of harbors was less frequent than usual, and no reports of port congestion were noted until late in December of 1960. Some progress also was noted

* Table 6 follows on p. 21.

~~S-E-C-R-E-T~~

~~SECRET~~

Table 6

Estimated Performance of the Merchant Fleets
of the Communist Far East a/
1956-60

<u>Country</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>
<u>Million Metric Tons Carried</u>					
Communist China	11.0	13.3	19.7	31.8	40
North Korea	1.0	1.1	2.0	2.8	3
Total	<u>12.0</u>	<u>14.4</u>	<u>21.7</u>	<u>34.6</u>	<u>43</u>
<u>Million Ton-Miles <u>b/</u></u>					
Communist China <u>c/</u>	6,100	7,700	10,200	15,500	19,500
North Korea	16.5	20.3	37.2	56.2	73.8
North Vietnam	19.5	17.4	29.8	33.9	43.4
Total <u>c/</u>	<u>6,100</u>	<u>7,700</u>	<u>10,300</u>	<u>15,600</u>	<u>19,600</u>

a. These figures include performance of chartered Free World ships in Communist China's coastal trade. Figures for North Korea include inland water traffic. For the first time it has been possible to break down the performance of North Vietnam and to remove the inland water performance figures. Data are not available for North Vietnam on metric tons of cargo carried.

b. Metric ton - nautical miles.

c. Data are rounded to the nearest 100 million metric ton - nautical miles.

in improving coordination among shippers, railroads, and the merchant fleet. It is believed, however, that the Chinese failed to fulfill the performance plan for their merchant fleet. It is estimated that water transport performance increased in 1960 by about 26 percent, but this increase is assumed to apply equally to coastal and inland water transport and is considerably short of the planned 38 percent for these modes of transport.

~~SECRET~~

~~SECRET~~

B. Communist China

1. Growth of the Fleet

At the end of 1960 the merchant fleet of Communist China included 147 ships totaling about 761,000 DWT. Additions to the fleet continued to be predominantly general cargo ships, and only 1 of the 20 ships added to the fleet in 1960 was a tanker.* By the end of the year, however, the Chinese were engaged actively in negotiations to acquire more tankers.

The acquisitions in 1960 resulted in an increase in the fleet capacity of 21 percent compared with an increase of 30 percent in 1959. This smaller increase indicated that the Chinese fell behind in their attempt to achieve an announced fleet goal of 3.1 million DWT by 1965. If this goal is to be attained, the fleet would be expected to expand at a rate of 31 percent annually between the end of 1959 and the end of 1965.

Additions to the fleet during 1960 cost Communist China an amount estimated at \$24.5 million. About \$21 million of this total represented the cost of building seven ships totaling 31,000 DWT in domestic yards. The remaining \$3.5 million constituted the estimated cost to China of 12 ships totaling 104,000 DWT purchased from non-Bloc countries. In addition, China received one ship from Poland and transferred one to Czechoslovakia, but details of the transactions are not known.

Acquisitions in 1960 continued to be from both Bloc and non-Bloc sources (see Table 7**). In examining Table 7 it must be kept in mind that 1956 and 1957 were years of slow growth of the fleet and that 1958-60 were years of rapid growth.

Additions to the fleet from domestic production declined during 1960 because of the announced inability of the Chinese to complete the outfitting of vessels under construction, but domestic production has continued to be an important source of additions to the fleet. In the past 3 years, however, about 60 percent of the additions to the merchant fleet of Communist China were purchases from the West. Such purchases increased sharply in 1960, accounting for 72 percent of new additions compared with only 49 percent in 1959. In almost every case these secondhand ships were more than 15 years old. In the present depressed world market the Chinese probably have found it as cheap to purchase these ships as it would be to charter

* Net additions to the fleet were 19 ships. One ship was transferred to Czechoslovakia during 1960.

** Table 7 follows on p. 23.

~~SECRET~~

~~S-E-C-R-E-T~~

Table 7

Source of Additions to the Merchant Fleet a/
of Communist China
1956-60

	1956		1957		1958		1959		1960	
Source	Number of Vessels	Percent of Tonnage	Number of Vessels	Percent of Tonnage	Number of Vessels	Percent of Tonnage	Number of Vessels	Percent of Tonnage	Number of Vessels	Percent of Tonnage
Domestic yards	1	8.5	0	0	6	18.6	10	35.8	7	21.7
Bloc countries	3	42.0	15	95.1	6	20.2	2	14.8	1	5.8
Non-Bloc countries	3	49.5	1	4.9	10	61.2	7	49.4	12	72.5

a. Including only ships of 1,000 GRT and above.

~~S-E-C-R-E-T~~

them for periods of 1 or 2 years. Since 1957, 35 percent of the capacity of the Chinese fleet has been purchased from the West. This reliance will continue for several years if the Chinese hope to attain their goals planned for 1965. Negotiations for the purchase of additional ships were continuing late in 1960, and at the end of the year the Chinese were negotiating for large tankers for the first time. Since then a Norwegian tanker of nearly 15,000 DWT has been purchased. The acquisition of large (10,000 to 25,000 DWT) tankers will increase substantially the capability of the fleet to move petroleum and petroleum products.

2. Utilization of Foreign Shipping

The dependence of Communist China on foreign merchant ships to move its seaborne cargo remained high in 1960. The assignment to the coastal trade of the new ships added to the fleet in 1960 made it possible for Chinese ships to carry 87 percent of the coastal trade compared with 84 percent in 1959. In spite of this improved performance the Chinese still had to rely on chartered ships to move at least 5.2 million tons of cargo in the coastal trade, approximately the same volume as chartered ships moved in 1959.

In addition, the Chinese remained completely reliant on chartered ships to move their international seaborne trade, which is estimated to have been 12 million tons in 1960. Thus the Chinese utilized chartered ships to move a total of 17 million tons of seaborne cargo during 1960.

A matter for some surprise was the failure of Communist China to make an initial venture into international shipping services with ships flying the Chinese flag. This failure may be explained in part by the inability of China to complete the outfitting of ships produced in domestic yards. Because of a shortage of navigation components, some of these ships have been waiting for more than 2 years to be outfitted. Until these bottlenecks are eliminated, the Chinese will remain highly dependent on chartered shipping.

3. Prospects for 1961

Although the Chinese fleet will continue to expand and to improve in quality during 1961, increased reliance on foreign shipping is likely. The best growth that the Chinese Communists have been able to achieve thus far was about 146,000 DWT in 1959. Although this record may be surpassed in 1961, the rate of growth will still be below the level needed to meet goals planned for 1965. Probably more than 50 percent of the additions to the fleet in 1961 will be purchases from the West. The fleet at the end of 1961

~~S-E-C-R-E-T~~

would be about adequate for the coastal trade were it not for the Chinese Nationalist control of the Formosa Strait. Until these controls are eliminated, the Chinese Communists will be forced to utilize some Western shipping in the coastal trade. If negotiations are completed in 1961 for the purchase of large tankers, they probably will be used to transport petroleum to China from distant areas such as the Middle East and the Black Sea. It would be expected that these tankers would fly the flag of Communist China, but they may be registered in the fleet of another Bloc country as apparently some Chinese ships are at present.

An increased involvement of foreign shipping in Chinese Communist trade can be expected throughout 1961, and, based on the first quarter activity, the participation of Free World shipping will increase while Bloc shipping probably will show a decline. The major portion of the increase in shipping will result from Australian and Canadian shipments of grain which are being transported primarily in Free World ships under charter to the Chinese. It is estimated that shipments of grain to China by sea in 1961 will amount to 4 million tons which will require approximately 365 deliveries averaging 11,000 tons.

~~S-E-C-R-E-T~~

~~S-E-C-R-E-T~~

APPENDIX

STATISTICAL TABLES

- 27 -

~~S-E-C-R-E-T~~

[p. 26 blank]

[p.28 blank]

~~SECRET~~

Table 8

Merchant Fleets of the Sino-Soviet Bloc, by Type, Number, and Tonnage a/
1957-60 and 1965

Type of Ship and Area	1957		1958		1959		1960		1965 b/	
	Number	Thousand Deadweight Tons	Number	Thousand Deadweight Tons	Number	Thousand Deadweight Tons	Number	Thousand Deadweight Tons	Number	Thousand Deadweight Tons
Total tankers	108	795.2	119	896.4	133	1,028.8	152	1,351.5	249	3,033.6
USSR	95	742.2	102	793.1	113	884.1	128	1,163.0	204	2,611.6
European Satellites	4	34.9	6	75.3	9	116.7	12	156.1	20	298.0
Communist China	9	18.1	11	28.0	11	28.0	12	32.4	25 c/	124 d/
Total dry cargo ships	763	3,558.0	844	4,047.8	916	4,566.0	1,021	5,219.4	1,913	10,588.1
USSR	581	2,632.0	619	2,826.1	651	3,015.2	701	3,310.5	964	5,175.1
European Satellites	104	607.1	127	769.0	148	951.9	185	1,180.3	399	2,437.0
Communist China	78	318.9	98	452.7	117	598.9	135	728.6	550 e/	2,976
Total merchant fleet	871	4,353.2	963	4,944.2	1,049	5,594.8	1,173	6,570.9	2,162	13,621.7
USSR	676	3,374.2	721	3,619.2	764	3,899.3	829	4,473.5	1,168	7,786.7 f/
European Satellites	108	642.0	133	844.3	157	1,068.6	197	1,336.4	419	2,735.0
Communist China	87	337.0	109	480.7	128	626.9	147 g/	761.0	575	3,100

a. Including only ships of 1,000 GRT and above and including supply ships for the fishing fleets.

b. In most cases, estimates are based on announced plans.

c. The number of tankers is estimated, based on an average of about 5,000 DWT per tanker.

d. It is estimated that tankers will account for about 4 percent of the total fleet tonnage of Communist China.

e. The number of dry cargo ships is estimated, based on an average of about 5,500 DWT per ship.

f. The division of the Soviet fleet in 1965 between dry cargo vessels and tankers is made on the assumption that Soviet plans for 1965 include the accelerated purchases of tankers from the West. To the extent that these purchases are not included in the original plan, the 1965 goals probably would be adjusted upward.

g. Five additional ships of about 3,300 GRT each which nominally belong in the Yangtze River fleet are used occasionally on the coast.

~~SECRET~~

~~S-E-C-R-E-T~~

Table 9
Seaborne Foreign Trade of the Sino-Soviet Bloc
1956-60

	Thousand Metric Tons				
	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>Estimated 1960</u>
European Satellites a/					
Poland	<u>12,197</u>	<u>10,714</u>	<u>13,676</u>	<u>14,125</u>	<u>17,400</u>
Polish ships	2,310	2,646	2,729	3,377	4,100
Foreign ships	9,887	8,068	10,947	10,748	13,300
East Germany	<u>4,900</u>	<u>5,232</u>	<u>4,790</u>	<u>5,717</u>	<u>7,100</u>
East German ships	140	314	492	800	1,000
Foreign ships	4,760	4,918	4,298	4,917	6,100
Czechoslovakia	<u>3,840</u>	<u>3,650</u>	<u>3,960</u>	<u>4,340</u>	<u>5,335</u>
Czechoslovak ships	140	100	105	250	440
Foreign ships	3,700	3,550	3,855	4,090	4,895
Bulgaria	<u>761</u>	<u>992</u>	<u>709</u>	<u>1,450</u>	<u>1,700</u>
Bulgarian ships	271	293	300	450	700
Foreign ships	490	699	409	1,000	1,000
Rumania	<u>4,500</u>	<u>4,700</u>	<u>5,000</u>	<u>5,300</u>	<u>5,500</u>
Rumanian ships	145	165	160	165	200
Foreign ships	4,355	4,535	4,840	5,135	5,300
Hungary	<u>850</u>	<u>980</u>	<u>850</u>	<u>1,000</u>	<u>1,100</u>
Hungarian ships	45	45	50	75	90
Foreign ships	805	935	800	925	1,010
Albania	<u>505</u>	<u>540</u>	<u>700</u>	<u>850</u>	<u>1,100</u>
Albanian ships	60	70	70	150	300
Foreign ships	445	470	630	700	800
Total	<u>27,553</u>	<u>26,808</u>	<u>29,685</u>	<u>32,782</u>	<u>39,235</u>

- 30 -

~~S-E-C-R-E-T~~

~~S-E-C-R-E-T~~

Table 9
Seaborne Foreign Trade of the Sino-Soviet Bloc
1956-60
(Continued)

	Thousand Metric Tons				
	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>Estimated 1960</u>
Minus duplication of trade between the Satellites	550	540	600	650	700
Balance	<u>27,003</u>	<u>26,268</u>	<u>29,085</u>	<u>32,132</u>	<u>38,535</u>
Satellite ships	3,111	3,633	3,906	5,267	6,830
Foreign ships	23,892	22,635	25,179	26,865	31,705
USSR	<u>18,300</u>	<u>22,100</u>	<u>26,600</u>	<u>34,800</u>	<u>43,300</u>
Soviet ships	8,500	11,900	14,600	17,700	20,000
Foreign ships	9,800	10,200	12,000	17,100	23,300
Total Soviet Bloc	<u>45,303</u>	<u>48,368</u>	<u>55,685</u>	<u>66,932</u>	<u>81,835</u>
Minus duplication between the USSR and the Satellites b/	4,000	4,000	5,000	5,800	6,500
Balance	<u>41,303</u>	<u>44,368</u>	<u>50,685</u>	<u>61,132</u>	<u>75,335</u>
Domestic ships	11,611	15,533	18,506	22,967	26,830
Foreign ships	29,692	28,835	32,179	38,165	48,505
Communist China	N.A.	N.A.	<u>10,500</u>	<u>11,500</u>	<u>12,000</u>
Chinese ships	N.A.	N.A.	0	0	0
Foreign ships	N.A.	N.A.	10,500	11,500	12,000
Total Sino-Soviet Bloc	N.A.	N.A.	<u>61,185</u>	<u>72,632</u>	<u>87,335</u>
Minus duplication between China and the Soviet Bloc c/	N.A.	N.A.	2,700	3,100	3,200
Balance	N.A.	N.A.	<u>58,485</u>	<u>69,532</u>	<u>84,135</u>
Domestic ships	N.A.	N.A.	18,506	22,967	26,830
Foreign ships d/	N.A.	N.A.	39,979	46,565	57,305

~~S-E-C-R-E-T~~

~~SECRET~~

Table 9

Seaborne Foreign Trade of the Sino-Soviet Bloc
1956-60
(Continued)

- a. Polish data are all from official Polish publications, with the 1960 estimate based on results during 9 months. The total seaborne trade figures for Czechoslovakia and Bulgaria through 1958 are official published figures. East German total trade has been estimated on known transit trade through several European and Bloc ports. All other trade data have been estimated from varied and random indicators, with Rumanian trade data the least reliable. With the exception of Polish and Bulgarian data, which are from official publications, the amounts carried by Satellite ships are estimated from total fleet performances.
- b. These figures are estimates based generally on piecemeal information. The weakest facet is trade between Rumania, Bulgaria, and the USSR moving on the Black Sea, for which there are virtually no data except general background information. Consequently these estimates may be high or low by as much as 25 percent.
- c. Estimates are a result of either published information on seaborne trade moving between China and each European Bloc country or compilations of known shipments. The estimates may be as much as 15 percent low.
- d. These amounts of cargo shown as shipped on "foreign" ships include cargo carried by Bloc ships for other Bloc members. No compilation has been possible on a ship-by-ship basis, but judging by a few published reports on Polish performance and scattered indicators on other fleets, as much as 2.5 million to 3.0 million tons of the 57 million carried by "foreign" ships in 1960 were carried by Bloc ships.

~~SECRET~~

~~S-E-C-R-E-T~~

Table 10
Estimated Performance of the Merchant Fleets
of the European Satellites a/
1956-60

<u>Country</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960 <u>b/</u></u>
Thousand Metric Tons Carried					
Poland <u>c/</u>	2,930	3,397	3,879	4,646	5,800
East Germany	172	370	593	981	1,370
Czechoslovakia	188	125	142	307	495
Bulgaria	698	718	762	898	1,200
Rumania	192	224	217	215	190
Hungary	50	50	53	76	91
Albania	119	133	123	200 <u>d/</u>	390
Total	<u>4,349</u>	<u>5,017</u>	<u>5,769</u>	<u>7,323</u>	<u>9,536</u>
Million Ton-Miles <u>e/</u>					
Poland <u>c/</u>	9,384	10,611	12,052	15,900	20,300
East Germany	222	449	2,017	4,909	5,650
Czechoslovakia	1,134	1,266	1,277	2,225	2,900
Bulgaria	590	840	1,133	1,134	2,400
Rumania	339	493	514	529	600
Hungary	58	70	69	101	124
Albania	9	18	16	23 <u>d/</u>	155
Total	<u>11,736</u>	<u>13,747</u>	<u>17,078</u>	<u>24,821</u>	<u>32,129</u>

a. Including performance of ships of less than 1,000 GRT.

b. In most cases, estimates are based on published data covering a portion of the year, with the rest of the year being estimated on the basis of the ships added and routes sailed. For those countries which published no performance data, the estimate for the entire year was based on prior performance and the growth of the fleet.

c. Including cargo carried by the Polish ships assigned to the Chinese-Polish Shipbrokers Corporation.

d. Estimated on the basis of the fleet in operation, performance of the ships in prior years, and announced performance for 2 months of 1960.

e. Metric ton - nautical miles.

~~S-E-C-R-E-T~~

Table 11

Merchant Fleets of the European Satellites, by Type, Number, and Tonnage a/
1957-60 and 1965

Country and Type of Ship	1957		1958		1959		1960 <u>b/</u>		Estimated 1965	
	Number	Thousand Deadweight Tons	Number	Thousand Deadweight Tons	Number	Thousand Deadweight Tons	Number	Thousand Deadweight Tons	Number	Thousand Deadweight Tons
Poland	80	497.1	91	584.8	101	698.6	119	840.4	220 <u>c/</u>	1,500.0 <u>c/</u>
Tanker	4	34.9	4	52.3	5	71.7	5	71.7	9	150.0
Dry cargo	76	462.2	87	532.5	96	626.9	114	768.7	211	1,350.0
East Germany	5	33.1	15	120.7	21	173.7	29	242.1	73 <u>c/</u>	495.0 <u>c/</u>
Tanker	0	0	2	23.0	2	23.0	4	49.7	6	83.0
Dry cargo	5	33.1	13	97.7	19	150.7	25	192.4	67	412.0
Czechoslovakia	3	25.8	5	48.3	8	91.0	11	113.3	20	200.0
Tanker	0	0	0	0	1	20.2	1	20.2	2	40.0
Dry cargo	3	25.8	5	48.3	7	70.8	10	93.1	18	160.0
Bulgaria	8	45.6	2	48.8	11	53.8	15	74.1	42 <u>c/</u>	240.0 <u>c/</u>
Tanker	0	0	0	0	1	1.8	2	14.5	3	25.0
Dry cargo	8	45.6	9	48.8	10	52.0	13	59.6	39	215.0

~~SECRET~~

Table 11

Merchant Fleets of the European Satellites, by Type, Number, and Tonnage a/
1957-60 and 1965
(Continued)

Country and Type of Ship	1957		1958		1959		1960 <u>b/</u>		Estimated 1965	
	Number	Thousand Deadweight Tons	Number	Thousand Deadweight Tons	Number	Thousand Deadweight Tons	Number	Thousand Deadweight Tons	Number	Thousand Deadweight Tons
Rumania	7	34.7	7	34.7	7	34.7	11	45.7	30 <u>c/</u>	190.0 <u>c/</u>
Tanker	0	0	0	0	0	0	0	0	0	0
Dry cargo	7	34.7	7	34.7	7	34.7	11	45.7	30	190.0
Hungary	2	5.7	6	7.0	6	7.2	8	9.7	22	80.0 <u>c/</u>
Tanker	0	0	0	0	0	0	0	0	0	0
Dry cargo	5	5.7	6	7.0	6	7.2	8	9.7	22	80.0
Albania	0	0	0	0	3	9.6	4	11.1	12	30.0
Tanker	0	0	0	0	0	0	0	0	0	0
Dry cargo	0	0	0	0	3	9.6	4	11.1	12	30.0
Total Satellites	108	642.0	133	844.3	157	1,068.6	197	1,336.4	419	2,735.0
Tankers	4	34.9	6	75.3	9	116.7	12	156.1	20	298.0
Dry cargo	104	607.1	127	769.0	148	951.9	185	1,180.3	399	2,437.0

- a. Including only ships of 1,000 GRT and above and including supply ships for the fishing fleets. For the years 1955-56, see the 1959 Annual Review, CIA/RR EM 60-14, Annual Review of Merchant Shipping in the Sino-Soviet Bloc, 1959, 10 August 1960, SECRET.
- b. Estimated on known acquisitions and losses.
- c. Estimate based on published plan data.

~~SECRET~~